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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/642,387	08/15/2003	Mark D. Anderson	RATLP004C3	9477
48231	7590	09/08/2006	EXAMINER	
HAMILTON, BROOK, SMITH & REYNOLDS 530 VIRGINIA ROAD PO BOX 9133 CONCORD, MA 01742-9133			INGBERG, TODD D	
			ART UNIT	PAPER NUMBER
			2193	

DATE MAILED: 09/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/642,387

Applicant(s)

ANDERSON ET AL.

Examiner

Todd Ingberg

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 40-74 is/are pending in the application.
- 4a) Of the above claim(s) 1-39 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 40-74 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 August 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>4/26/04</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

Claims 40 - 74 have been examined.

Claims 1 – 39 have been canceled.

Claims 40 - 74 have been added.

#### ***Drawings***

1. Figures 2 and 5 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

#### ***Specification***

2. The legal words system and method should be deleted from the Abstract.
3. The Preliminary amendment of April 16, 2004 has been entered.

#### ***Information Disclosure Statement***

4. The Information Disclosure Statement filed April 26, 2004 has been considered.

#### ***Claim Rejections - 35 USC § 101***

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 54 – 74 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The current focus of the Patent Office in regard to

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statutory inventions under 35 U.S.C. § 101 for method claims and claims that recite a judicial exception (software) is that the claimed invention recite a practical application. Practical application can be provided by a physical transformation or a useful, concrete and tangible result. No physical transformation is recited and additionally, the final result of the claim is a remote monitor and tangible mediums are present which is not a tangible result because the result is not clearly and concisely claimed to be storing on the computer readable medium. The claims have the ability to claimed but not actually performing the operation. The following link on the World Wide Web is for the United States Patent And Trademark Office (USPTO) policy on 35 U.S.C. §101.

[http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/guidelines101\\_20051026.pdf](http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/guidelines101_20051026.pdf)

### ***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 40 – 44, 46, 49-51, 54-58, 60 and 68-74 are rejected under 35 U.S.C. 102(b) as being anticipated by the commercial product HP OpenView as documented in the March 1995 text book, “Focus on OpenView – A Guide to Hewlett-Packard’s Network and Systems Management Platform”, by Nathan J. Muller (HP).

#### **Claim 40**

HP anticipates a computer program product for remotely monitoring execution of a computer program (HP, Chapter 4, page 68, monitoring), comprising: computer code that collects data during an execution of a computer program using at least one monitoring instruction (HP, page 68, bullet one), the at least one monitoring instruction being associated with the computer program (HP, pages 69 and 71, components and types of monitoring), the data being associated with the execution; computer code that sends the collected data to a remote system; a computer readable storage medium that stores the computer codes (HP, page 70, Central Control).

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**Claim 41**

The computer program product of claim 40, wherein the computer readable medium is a CD-ROM, floppy disk, tape, flash memory, system memory, or hard drive. (HP, page 57, bottom of page).

**Claim 42**

The computer program product of claim 40, wherein sending the collected data to the remote system includes automatically sending the collected data to the remote system. As per claim 40.

**Claim 43**

The computer program product of claim 40, further including changing the at least one monitoring instruction over the computer program development cycle. As per claim 40 and HP, pages 61-63.

**Note**

The limitation “over the computer program development cycle.” Is given no patentable weight. The time period is not patentable. Claim lacks steps and considered intended use.

**Claim 44**

The computer program product of claim 40, further including classifying the execution of the computer program as normal or abnormal. HP, page 60, top of page

**Claim 46**

The computer program product of claim 40, further including allowing a user to customize processing that will be performed when the computer program finishes the execution. HP, pages 206 and 220 – bullets 2 and 3.

**Claim 49**

The computer program product of claim 40, further including remotely debugging the computer program. HP, page 69 – a form of remote debugging.

**Claim 50**

The computer program product of claim 40, further including sending a version of the computer program to the remote system during the execution of the computer program. HP, pages 179-182 and 189.

**Claim 51**

The computer program product of claim 50, further including downloading a new version of the computer program from the remote system. As per claim 50.

**Claim 54**

A computer program product for remotely monitoring execution of a computer program, comprising the steps of:

computer code that executes a computer program including at least one monitoring instruction for collecting data regarding the execution of the computer program;

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computer code that for the at least one monitoring instruction that collect data regarding the execution of the computer program;  
computer code that sends the collected data to a remote system; and a computer readable storage medium that stores the computer codes. As per claim 40.

**Claim 55**

The computer program product of claim 54, wherein the computer readable medium is a CD-ROM, floppy disk, tape, flash memory, system memory, or hard drive. As per claim 40.

**Claim 56**

The computer program product of claim 54, further comprising the step of automatically sending the collected data to the remote system when the computer program finishes execution. As per claim 46.

**Claim 57**

The computer program product of claim 54, further comprising the step of changing the at least one monitoring instruction over the computer program development cycle. As per claim 43.

**Claim 58**

The computer program product of claim 54, further comprising the step of classifying the execution of the computer program as normal or abnormal. As per claim 44.

**Claim 60**

The computer program product of claim 54, further comprising the step of allowing a user to customize processing that will be performed when the computer program finishes execution. As per claim 46.

**Claim 68**

The computer program product of claim 54, further comprising the step of sending a version of the computer program to the remote system during execution of the computer program. As per claim 50.

**Claim 69**

The computer program product of claim 68, further comprising the step of downloading a new version of the computer program from the remote system. As per claim 50.

**Claim 70**

The computer program product of claim 54, further comprising the step of sending information to a bug tracking application. As per claim 40.

**Claim 71**

The computer program product of claim 54, further comprising the step of, for each portion of the computer program designed by a different vendor, collecting data specific to each portion. HP, page 199, Resource accounting for Unix users.

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**Claim 72**

The computer program product of claim 54, wherein the at least one monitoring instruction specifies a vendor. As per claim 71.

**Claim 73**

The computer program product of claim 72, further comprising the step of utilizing a Windows hook to intercept a system call invoked by the computer program. HP, pages 116-117, RMON monitoring agent for Windows.

**Claim 74**

The computer program product of claim 54, wherein the at least one monitoring instructions are computer platform independent. HP, page 182, use of Industry standards and page xix, multi vendor.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 45, 47-48, 52,53,59,61 – 67 are rejected under 35 U.S.C. 103(a) as being unpatentable over **HP** as per above in view of USPN #4,589,068 **Heinen** JR, issued May 13, 1986 and filed October 3, 1983.

**Motivation to Combine**

HP teaches a commercial product from the 1990's which was for sale and for use long enough for a text book to be published and a joint venture with Computer Associates to form, by the publication date. The product teaches monitoring networks and controlling hardware, software and firmware. HP also teaches configuring workstations with scripts on the workstation (HP, page 220) and the collecting of information from monitoring (Claim 1) and the collection of files (HP, page 180). What HP does not explicitly teach is the running of the debugger on the client machine. It is Heinen who teaches remote debugging (Heinen, Abstract) from October 3, 1983 (file date). Therefore, not only does HP support the functionality required to implement remote debugging but it would have been obvious to one of ordinary skill in the art at the time of invention to combine HP and Heinen, because remote debugging makes software more reliable.

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**Claim 45**

The computer program product of claim 44, further including saving a call stack in the collected data if the execution of the computer program is classified as abnormal. Heinen, Abstract, call stack is an inherent structure in debuggers and HP pages 164-166.

**Claim 47**

The computer program product of claim 40, further including generating a symbolic call stack on the remote system so that the computer program may be debugged remotely. As per claim 45.

**Claim 48**

The computer program product of claim 40, wherein the computer program is compiled on the remote system, the method further including storing a module map when the computer program is compiled on the remote system. Heinen, Col 1, lines 5-14 and HP, page 180, software and their dependencies.

**Claim 52**

The computer program product of claim 40, further including incorporating the at least one monitoring instruction into the computer program. As per claim 40.

**Claim 53**

The computer program product of claim 40, further including linking the at least one monitoring instruction into the computer program. Heinen, Abstract, ability to debug a program requires a form of linking debug to program.

**Claim 59**

The computer program product of claim 58, further comprising the step of saving the call stack in the collected data if the execution of the computer program is classified as abnormal. As per claim 45.

**Claim 61**

The computer program product of claim 54, further comprising the step of generating a symbolic call stack on the remote system so that the computer program may be debugged remotely. As per claim 47.

**Claim 62**

The computer program product of claim 54, wherein the computer program is compiled on the remote system and further comprising the step of storing a module map when the computer program is compiled on the remote system (HP, pages 180, collection of files for products, sub-products in hierarchical format and with software dependencies).

**Claim 63**

The computer program product of claim 62, further comprising the step of storing a call stack and module list when the computer program finishes execution. As per claim 47.



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**Claim 64**

The computer program product of claim 63, further comprising the step of generating a module name relative virtual address (RVA) list from the call stack and the module list. As per claims 1 and 62.

**Claim 65**

The computer program product of claim 64, further comprising the step of sending the module name RVA list to the remote system. As per claim 64.

**Claim 66**

The computer program product of claim 65, further comprising the step of generating a symbolic call stack on the remote system from the module map and the module name RVA list so that the computer program may be debugged remotely. As per claims 1, 48 and 62.

**Claim 67**

The computer program product of claim 54, further comprising the step of remotely debugging the computer program. As per claim 49.

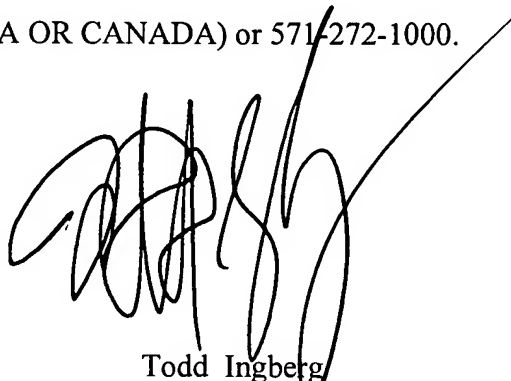
***Correspondence Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Todd Ingberg whose telephone number is (571) 272-3723. The examiner can normally be reached on during the work week..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on (571) 272-3719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Todd Ingberg  
Primary Examiner  
Art Unit 2193

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